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(54) Title: METHOD OF TRANSPOSON-MEDIATED MUTAGENESIS IN THE NEMATODE CAENORHABDITIS ELEGANS

(57) Abstract: The present invention provides methods for generating and identifying mutations in *C. elegans*. Disclosed herein are methods for introducing DNA into the *C. elegans* germline, methods for expressing DNA in the *C. elegans* germline, and methods for generating *C. elegans* mutants by using controlled mobilization of endogenous and heterologous transposons. Also disclosed are a transgene construct for expression in *C. elegans* and methods for inserting single copy DNA sequences into the *C. elegans* germline, and engineering mutations into the *C. elegans* genome.

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